MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___ **no** X

Property Name: SHA Bridge No. 1100900, MD 42 over Glade Run Inventory Number: G-II-A-361

Address: Asher Glade Road (MD 42) Historic district: ___ yes X no

City: Asher Glade Zip Code: ___ County: Garrett

USGS Quadrangle(s): Friendsville

Property Owner: State Highway Administration Tax Account ID Number: ___

Tax Map Parcel Number(s): ___ Tax Map Number: ___

Project: Reevaluation of Highway Bridges Statewide MD Agency: FHWA/MD SHA

Agency Prepared By: KCI Technologies, Inc.

Preparer's Name: Gail Walls Date Prepared: 10/16/2009

Documentation is presented in: Project Review and Compliance Files

Preparer's Eligibility Recommendation: ___ Eligibility recommended X Eligibility not recommended

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

Complete if the property is a contributing or non-contributing resource to a NR district/property

Name of the District/Property: ___

Inventory Number: ___ Eligible: ___ yes Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

Description of Bridge

SHA Bridge No. 1100900 (MHT No. G-II-A361) is located in a rural area in Garrett County near Asher Glade and carries MD 42 over Glade Run. The bridge is located within the Garrett County Recognized Heritage Area.

Built in 1933, the twenty-nine foot long, one-span concrete girder bridge carries one lane of traffic in each direction. The superstructure consists of open-balustrade parapets with paneled ends, concrete deck, and concrete girders supported by concrete abutments and wingwalls. MD 42 runs north-south and is classified as a Rural Major Collector roadway. The current ADT is 1,161 while the projected ADT is 1,339; the BSR is 81.8.

Background

The Interagency Historic Highway Bridge Inventory Committee (HHBIC) considered the MIHP form in 1997 and subsequently determined Bridge No. 1100900 to be eligible for listing in the NRHP under Criterion C. The Maryland Historical Trust (MHT)

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ___ **Eligibility not recommended** X

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments: lost integrity

Reviewer, Office of Preservation Services — Date: 5/14/10

Reviewer, National Register Program — Date: 5/18/10

20100192

concurred with the determination in 2001.

SHA Bridge No. 1100900 was re-evaluated for NRHP eligibility as part of the 2009 statewide re-evaluation of the eligible bridges in SHA's Historic Highway Bridge Inventory. SHA requested that KCI conduct research to gather information and provide additional analysis of each integrity and significance to supplement the original NRHP evaluation. As part of the re-evaluation of Bridge No. 1100900 in 2009, KCI conducted additional research at SHA's Office of Structures (OOS) to gather information on alterations or repairs made to the bridge prior to 1998. The following files at OOS were reviewed by the architectural historians: inspection files, repair history files, bridge plans, Bridge Inspection and Remedial Engineering (BIRE) worklist, and Structure Inventory and Appraisal (SI&A) reports. The Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report, as well as A Context for Common Historic Bridge Types, NCHRP Project 25-25, Task 15, were both consulted in evaluating the bridge's historic significance. KCI also referenced each bridge's original Maryland Inventory of Historic Places (MIHP) form for information previously gathered on the bridge and as a measure of how the bridge's integrity has changed since 2001. As part of the re-evaluation of Bridge No. 1100900 in 2009, KCI architectural historians visited the bridge to examine and document current conditions with field notes, digital photography, and black and white photography.

Evaluation and Justification

In the 1995 MIHP form, it was noted that the January 1995 inspection reports were reviewed during preparation of the form, however, no detail from the inspection reports were included in the MIHP form. The MIHP form stated that "recent reports indicate that the structure exhibits signs of age and wear" but that none of the CDEs had been replaced or removed. The form also noted that the bridge was not a significant example of the work or the manufacturer, designer and/or engineer. Inspection reports from 1995 through 2008 note areas of deterioration throughout the structure, but do not indicate that any major repairs have been undertaken during this period.

In 1995 the inspection report rated the superstructure a 5. The inspection report noted that the girders had cracks and stalactites; all interior girders except for girder #4 had efflorescence and girder #5 exhibited signs of earlier repair that was failing. The parapets and balusters had scaling along the curb line and at the spindles. The survey noted that the paint was flaking; it was also observed that the spindles (an unspecified number) had exposed rebar. The 2009 field visit noted that the spindles in the parapets were in poor condition. Nearly every spindle has exposed rebar. The east parapet has severe spalling with exposed rebars. The west parapet has scaling at the curb line running the entire length. The spindles have fine, irregular and full height vertical crack

In 1995 the inspection report rated the substructure a 6. The inspection report noted that unidentified repair work had been completed. The south abutment had delamination; heavy scaling was noted on both abutments. The wingwalls had scaling at the water line and on the caps. The northeast wingwall was spalling with delamination. The southeast wingwalls had severe scaling. Currently, the abutments have scaling, efflorescence, delamination, and rust stains. Cracks were also noted on the south abutment some with efflorescence. The southeast wingwall is deteriorating with exposed aggregate. Furthermore, the 2009 field visit noted that the northwest wingwall is eroding at the top, and there is also a severe crack where the wingwall meets the deck.

In 1995 the inspection report rated the deck a 5. The report noted that the concrete deck had some longitudinal cracking. The inspection report noted that there is a build-up of debris in the shoulders and hollow soundings at the southeast corner in the shoulder. The 2009 field visit noted that the curb line is eroding on both the west and east sides.

A close examination reveals that the bridge has lost integrity because of a continuous loss of materials, design, and workmanship. The setting, location, and association of the bridge have not changed and remain good. The overall feeling of the bridge is poor

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

due to the deteriorated condition of the structure. The structure is not an important example of a concrete girder bridge of its time period.

Standard plans for concrete girder bridges were first developed in Maryland in 1912. In 1919 the plans were re-designed to allow for widening of the roadways and reinforcement of the bridges. The 1924 standard T-beam plans were revised so that no construction joint was placed between the girders and the slab. The slab was to be poured as a "monolithic mass." The plans were redesigned to consider bridges up to 40 feet in length. In 1930 the plans were redrawn to increase the roadway width to 27 feet and introduced the pierced concrete railing. The plans were revised again in 1933, to allow for a width of 30 feet. According to the context "new standard plans were by this time unremarkable," (Spero, p. 181).

According to the Context for Common Historic Bridge Types significant girder bridges constructed from standard plans should be constructed prior to 1925 preferably during the first decade of the twentieth century when standard plans were first introduced. Later significant girders were introduced after World War II as a precast beam or structural component girder bridge during interstate construction (NCHRP Report 25-25, Task 15 p. 3-94).

Although the HHBIC determined that SHA Bridge No. 1100900 was eligible for listing in the NRHP because it retained all of its primary character defining elements, the original MIHP form noted that this bridge was not a significant example of its type and i not a significant example of the work of the State Roads Commission in the 1930s. Research conducted as part of this study did not identify associations with any important architect or engineer and the bridge does not possess high artistic value. Based on thi evaluation, Bridge No. 1100900 is recommended not eligible for inclusion in the NRHP under Criterion C.

Additional research indicates that the bridge is not associated with any known event of local, regional, or national significance (Criterion A), or any known person of local, regional, or national significance (Criterion B). Criterion D was not evaluated as par of the historic standing structures studies for this project.

Bibliography

National Cooperative Highway Research Program. Transportation Research Council. National Research Council. Prepared by Parsons Brinkerhoff and Engineering and Industrial Heritage. A Context for Common Historic Bridge Types. NCHRP Project 25-25, Task 15. 2005.

Spero, P.A.C. and Company and Louis Berger & Associates. Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Prepared for Maryland State Highway Administration. July 1995. Revised October 1995.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

MIHP No. G-II-A-361
SHA Bridge No. 1100900
MD 42 over Glade Run
Garrett County, Maryland

Photograph Log

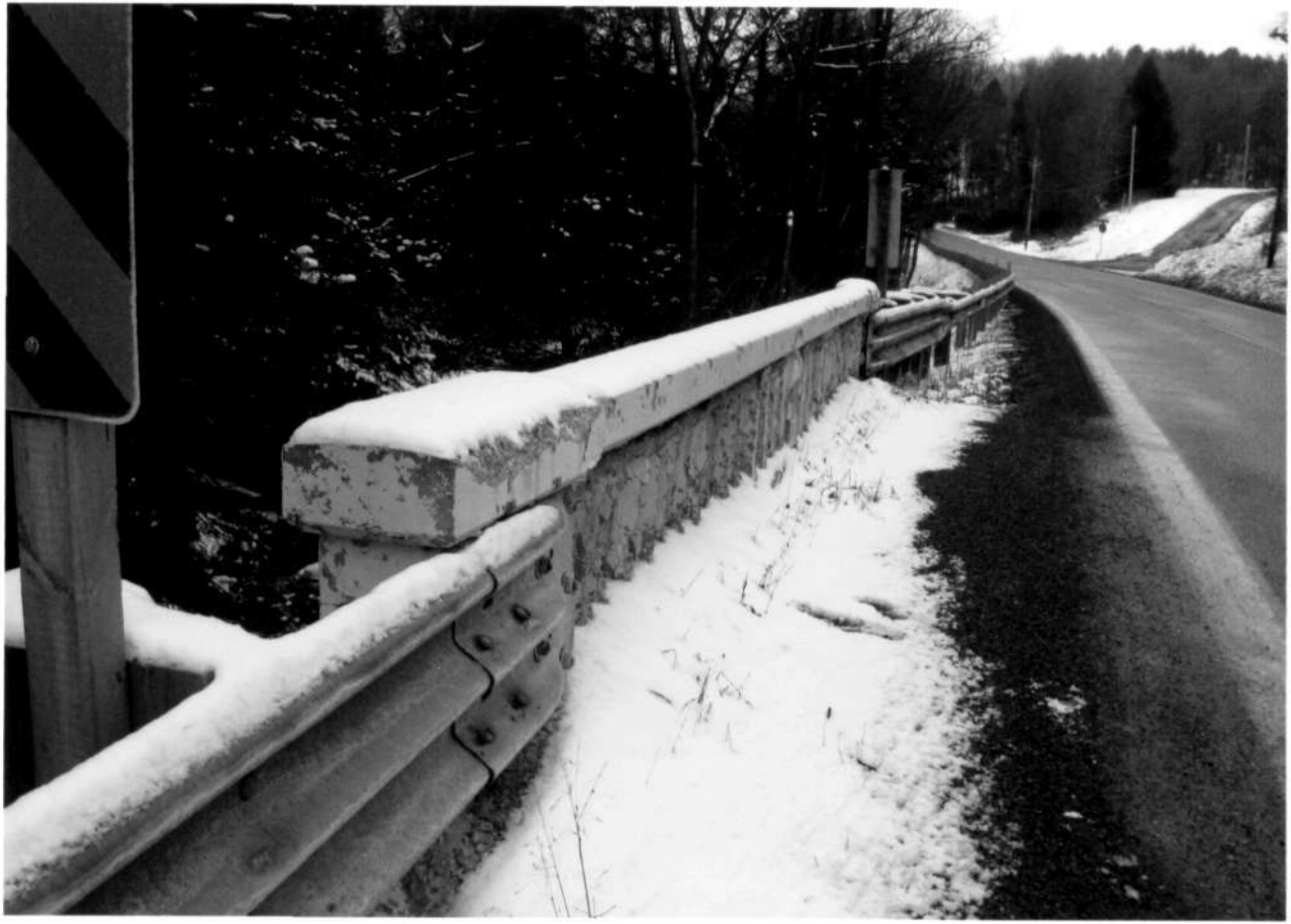
Image File Name	Description of View
G-II-A-361_2009-02-23_01.tif	West elevation, facing east
G-II-A-361_2009-02-23_02.tif	South approach, facing north
G-II-A-361_2009-02-23_03.tif	East interior of parapet, facing south
G-II-A-361_2009-02-23_04.tif	West interior of parapet, facing northwest
G-II-A-361_2009-02-23_05.tif	Detail of west parapet, facing west
G-II-A-361_2009-02-23_06.tif	East wingwall, facing west

Printed on Epson Premium Photo Paper Glossy with Epson UltraChrome Black Ink

Saved on Verbatim UltraLife Archival Grade DVD-R, AZO recording dye

G-11-A-361
SHA Bridge No 1100900 MD 42 over Glade Run
Garrett County, Maryland
Jimmy Skocik
February 23, 2009
MD SHPO
West elevation of bridge facing east
1/6

G-II-A-361
SHA Bridge No 1100900 - MD 42 over Glade Run
Garrett County, Maryland
Jimmy Slocik
February 23, 2009
MD SHPO
South approach of bridge facing north
2/4



G-II-A-361
SHA Bridge No 1100900 - MD 42 over Glade Run
Garrett County, MD
Jimmy Skoak
February 03, 2009
MD SHPO
East interior of parapet facing south
3/6

G-II-A-361
SHA Bridge No 1100900 - MD 42 over Glade Run
Garrett County, MD
Jimmy Skocik
February 23, 2009
MD SHPO
West interior of parapet facing northwest
4/6

G-II-A-361
SHA Bridge No 1100900 - MD 42 over Grade Run
Garrett County, MD
Jimmy Skocik
February 23, 2009
MD SHPO
Detail of west parapet facing west

G-II-A-361
SHA Bridge No 1100900 - MD 42 over Glade Run
Garrett County, MD
Jimmy Skocik
February 23, 2009
MD SHPO
East wingwall facing west
6/6

Maryland Historical Trust

Maryland Inventory of Historic Properties number: G-II-A-361

Name: 11009/ MD 42 over Glade Run

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

MARYLAND INVENTORY OF HISTORIC PROPERTIES **MHT NO. G-II-A-361**
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

NAME AND SHA NO.: 11009

LOCATION
Road Name and Number: MD 42 over Glade Run
City/Town: Asher Glade _ vicinity
County: Garrett

Ownership: X State _ County _ Municipal _ Other

Bridge projects over: _ Road _ Railway X Water _ Land

Is bridge located within designated district?: _ yes X no
__ NR listed district _ NR determined eligible district
__ locally designated _ other
Name of District _

BRIDGE TYPE

__ Timber Bridge
__ Beam Bridge __ Truss-Covered __ Trestle __ Timber-and-Concrete

__ Stone Arch Bridge

__ Metal Truss Bridge

__ Moveable Bridge
__ Swing __ Bascule Single Leaf __ Bascule Multiple Leaf
__ Vertical Lift __ Retractile __ Pontoon

__ Metal Girder
__ Rolled Girder __ Rolled Girder Concrete Encased
__ Plate Girder __ Plate Girder Concrete Encased

__ Metal Suspension

__ Metal Arch

__ Metal Cantilever

X Concrete
_ Concrete Arch _ Concrete Slab X Concrete Beam _ Rigid Frame
_ Other Type Name __

DESCRIPTION

Describe the Setting:

Located approximately 1.5 miles from the Pennsylvania state line, Bridge 11009 carries MD 42 over Glade Run in rural Garrett County. MD 42 runs in a generally north-south direction; Glade Run flows west-east. The creek runs through a wooded area which appears to be surrounded primarily by wooded land. Bridge 11009 lies within the Appalachian Plateau physiographic province, the mountainous region of western Maryland which includes the eastern continental divide.

Describe the Superstructure and Substructure:
(Discuss points identified in Context Addendum, Section C)

Bridge 11009 is a single-span concrete girder bridge with a clear span length of 26'. The 18' roadway carries two lanes of traffic. Each of the open balustraded concrete parapets feature two sections with 14 openings each. Steel W-beam guardrails are attached to the paneled endposts of the parapets. The substructure consists of striated concrete abutments and wing walls. The design of the bridge closely resembles that of the 1930s standard.

Based upon recent inspection reports and photographs dated January 1995, the bridge appears to be in good condition.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

According to available documentation, no significant alterations have been made to the bridge since its construction, however repairs have been made for deck punctures.

HISTORY

When Built: 1933
Why Built: Statewide road improvement programs and local transportation needs
Who Built: State Roads Commission of Maryland
Who Designed: Unknown
Why Altered: N/A

Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

_ A (Events) _ B (Person) _ C (Engineering/Architectural Character)

Was this bridge constructed in response to significant events in Maryland or local history?

The improvement of Garrett County roads most likely resulted from several events that occurred during the first three decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes through the state as well as connecting roads between counties. A later impact of this crusade included the widening, straightening, and grading of secondary roads, and construction of new bridges to carry these rebuilt roads. Further, the rapid increase of automobile, truck, and bus traffic prompted the replacement of the existing narrow and weak bridges with new, wider, and stronger concrete structures. As time, labor, and money-saving plans created by the State Roads Commission (SRC), the establishment of district engineering offices during the 1910s and the development of standardized bridge designs also aided in the construction of modern bridges throughout the state. During the 1920s, emphasis of the SRC was on improving safety and comfort of main routes while building up the secondary roads and the farm-to-market network of feeder roads. By the 1930s, bridges believed to be adequate when initial road reconstruction was undertaken became unacceptable for modern traffic and many new structures were constructed.

When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Garrett County.

Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?

No, this bridge is not located within an area which is eligible for historic district designation.

Is the bridge a significant example of its type?

Yes, due to its apparent lack of major alterations and fair condition, this bridge stands as a significant example of its type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

Yes, this bridge retains integrity of its character defining elements. Although recent reports indicate that the structure exhibits signs of age and wear, including cracking and spalling of the parapets, abutments, and wing walls, none of these character defining elements has been replaced or removed.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

Should this bridge be given further study before significance analysis is made, and why?

No, this bridge should not receive further study.

BIBLIOGRAPHY

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1959 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

SURVEYOR INFORMATION

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Organization: KCI Technologies, Inc. **Telephone:** (717) 691-1340
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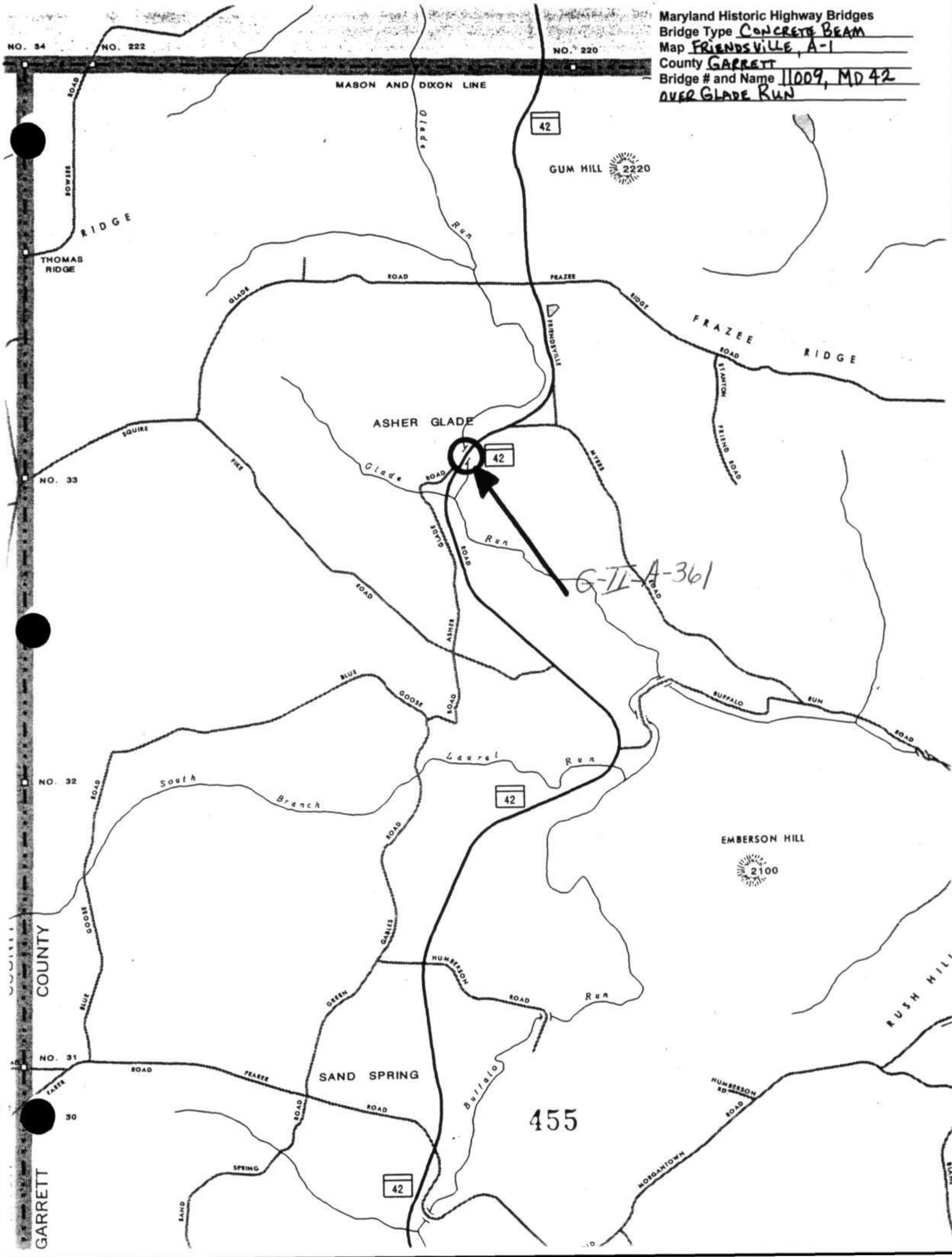
Mechanicsburg, PA 17055

Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map FRIENDSVILLE, A-1
County GARRETT
Bridge # and Name 11009, MD 42 OVER GLADE RUN



G-II-A 361
OVER GLADE RUN (Br# 11009)
GARRETT CO. Md
DAVE KING
1/26/95
SHA

SOUTHWEST APPROACH

1 of 1

G-II-A-361
OVER GLADE RUN (Br.# 11009)

GARRETT Co. Md.

DAVE KING

1/26/95
SHA

NORTHEAST APPROACH

2 of 4

G-II-A-361

OVER GLADE RUN (Br.# 11009)

GARRETT CO MD

DAVE KING

1/20/25

SHA

SOUTHEAST ELEVATION (DOWNSTREAM)

30 of 41

G-II-A-361
OVER GLADE RUN (Br.# 11009)
GARRETT CO. Md.
DAVE KING
1/26/95
SHA

NORTHWEST ELEVATION (UPSTREAM)

4 of 4